Arizona Influenza Pandemic Response Plan

Supplement 3: Health Care Coordination and Surge Capacity

Supplement 3: Table of Contents

I. Rationale

Arizona Department of Health Services (ADHS), county and tribal health departments, hospitals, other healthcare facilities, healthcare providers, emergency responders, law enforcement and many others in the community must prepare and respond closely together if a local epidemic is to be detected and managed in a timely and effective manner. Planning is a key factor in preparation for the State's response to a pandemic. Lessons learned from past influenza pandemics demonstrate that planning must take into account staffing, hospital surge capacities and capabilities, mass prophylaxis and/or vaccination, and disposition of remains.

During a pandemic, there will be an increased burden affecting the entire healthcare system. Facilities must be able to respond to day-to-day emergencies and care of their patients. Additional planning is therefore needed to increase the ability of healthcare professionals and first responders to function during a greater demand of their services related to a pandemic when there is fewer staff to continue essential services.

II. Overview

Two key strategies compose the Arizona plan to respond to an influenza pandemic. The aim of these strategies is to minimize the morbidity and mortality associated with the event. One strategy is containment which refers to preventing transmission and spread of the disease by implementing border control measures, isolation of the sick, quarantine of contacts (see Supplement 8), judicious use of antiviral medications (see Supplement 7) and maintenance of essential public health services. If there is an explosive spread within the general population, containment may not be possible. The strategy will then shift to an emphasis on the maintenance of essential public health and healthcare services.

The objectives of this supplement are to:

1. Ensure adequate surveillance is in place to detect a novel influenza virus
2. Limit the spread of influenza through early containment measures to increase the amount of time available to implement preparedness measures.
3. Limit morbidity and mortality during an influenza pandemic.
4. Provide the public, health care workers, the media and other public health service providers with timely, factual and readily available information at all pandemic stages
5. Address the stress on the healthcare system through early identification and use of additional resources.

III. Actions for the Interpandemic and Pandemic Alert Periods

A. Planning for Provisional Care in Hospitals

1. Planning Process

The planning process for interpandemic and pandemic alert periods is a complicated process that involves all available public health and health care assets. Arizona healthcare facilities must be capable of rapidly expanding services (surge capacities and capabilities) to meet interpandemic and pandemic influenza patient and public health needs. ADHS/BEPR is charged with developing a state healthcare coordination plan and assisting in the development of regional and county plans. There are other response plans in place that contain relevant information and should be used whenever possible. Arizona Emergency Preparedness and Response Public Health Region Committees should assist in the development of pandemic response plans within their jurisdiction. The planning process should include:

1. Pre-existing plans and papers from technical experts, procedures from WHO, HHS, and CDC, other State and local guidance should all be included in healthcare pandemic response plans.
2. In accordance with the National Response Plan (NRP), all agencies should be using the National Incident Management System (NIMS) and should have plans to establish an Emergency Operations Center (EOC) using the Incident Command System (ICS) structure.
3. Hospital planning is vital to the success of combating an influenza pandemic. Surge capacity and capability should be planned for and should consider other hospital, region, county, state and other community based organizations.

2. Planning Elements

a. Hospital Surveillance

Expanding influenza surveillance and epidemiological capacity at the local level is an important component of pandemic preparedness. Local disease surveillance and on-site laboratory testing are an essential first step in preparedness and is important in helping ADHS to react quickly. Hospital surveillance procedures are outlined in Supplement 1. Laboratory procedures are located in Supplement 2.

b. Hospital Communications

The role of the news media will be critical during a pandemic, however, healthcare information releases by hospitals, regions, and counties must be carefully coordinated with the ADHS to ensure the most accurate and consistent messages are provided and to prevent conflicting information. The communication procedures for all levels or public health response during a pandemic are summarized in Supplement 10.

1. Communications must be coordinated during pandemic operations so all elements of the public health response network operate as a single entity.
2. Hospital, regional and county internal communications are an integral component to keep Administration and Public Information Officers informed as to the entity's ability to meet the demands of the pandemic and still provide critical health care services to the community.

c. Education and Training

Each hospital should develop an education and training plan that addresses the needs of staff, patients, family members and visitors.

Staff Education:

- Identify educational resources for clinicians, including federally sponsored teleconferences, state and local health department programs, web-based training materials, and locally prepared presentations.
- General topics for staff education should include:
  - Prevention and control of influenza
  - Implications of pandemic influenza
  - Benefits of annual influenza vaccination
  - Role of antivirals
  - Infection control strategies

Education of patients, family members, and visitors

- Identify language-specific and reading-level appropriate materials
- Develop a plan for distributing information to all persons who enter the hospital. Identify staff to answer questions about procedures for preventing influenza transmission.

d. Triage, Clinical Evaluation and admission procedures

During the peak of a pandemic, hospital emergency departments, outpatient clinics and healthcare provider offices might be overwhelmed with patients seeking care. Triage should be conducted to: 1) identify persons who might have pandemic influenza, 2) separate them from others to reduce the risk of disease transmission, and 3) identify the type of care they require (i.e., home care or hospitalization). These procedures are outlined in Supplement 5, Clinical Guidelines.

e. Facility Access

Uncertainty, anxiety and ongoing stress will affect all segments of the population, which will place additional burdens on the health care system as well as individual and community recovery. Service demand will be heavy as treatment facilities seek to triage and treat those affected, those who believe they are infected and "normal" non-influenza patient loads. Hospitals must therefore restrict access, and if needed implement a lockdown to prevent unwanted infected people from entering the facility.

1. Visitors should be limited to reduce the likelihood of pandemic influenza transmission among visitors, patients, and healthcare workers.
2. Visitors should receive infection control training from hospital infection control departments (e.g., brochures, video) and comply with infection control measures.
3. Symptomatic persons exposed to pandemic influenza patients should be excluded from visitation of patients that do not have the influenza.
4. Transportation of the patients within the facility does not need to be restricted. Patient transportation requirements are listed in Supplement 4, Infection Control. Disinfection of the transportation equipment as well as other potentially exposed surfaces and equipment must take place.
5. Transportation outside of the facility may also be considered. Additional precautions and disinfection will be necessary if the person is undergoing mechanical ventilation.

f. Occupational Health

Employee health programs should institute a strategy to monitor the health of staff and patients who are potentially exposed to the pandemic influenza strain. Employee health programs should:

1. Develop an active education of *all* staff in hygiene precautions. This includes proper hand washing procedures and techniques for donning gloves, P95 mask, gown and eyewear.
2. Develop a plan to identify staff that may have acquired immunity to the pandemic influenza virus and might be deployed to high exposure areas.
3. Prepare for dislocation of hospital workforce due to illness, death and absenteeism. The hospital will be affected at all levels from, key administrative positions to essential service providers, including clerical and support staff. Collateral organizational structures, backups and workarounds must be in place prior to the pandemic.
4. Educate staff regarding the impact of a pandemic on the hospital and how it could influence their decision to continue to work in a potentially high risk environment.
5. Ensure time off policies and procedures and consider staffing needs during periods of clinical crisis.
6. Have mental health and faith-based resources identified as part of the hospital team to assist caregivers in the high stress environment during a pandemic.
7. Implement procedures to screen staff for possible onset of symptoms.
8. Anticipate the potential need to isolate staff working in high exposure areas such as the emergency department between shifts.
9. Ensure hospital workers and their immediate families receive prophylaxis and/or vaccination as appropriate.

g. Use and Administration of Vaccines and Antiviral Drugs.

Vaccines and antiviral drugs will be in short supply early in a pandemic. Prudent use will include holding the vaccines and antiviral drugs to ensure availability when they are required. Information on vaccines is located in Supplement 6. Procedures for antiviral medications can be found in Supplement 7.

h. Surge Capacity

The purpose of ADHS and Regional Hospital Surge Capacity and Capability Plans are to provide a framework for utilizing regional resources and capabilities to deliver hospital based care to the victims during a bioterrorism attack or pandemic. The secondary purpose of this plan to provide a framework that provides for the uninterrupted delivery of essential healthcare to the counties, tribal reservations and communities served by the hospitals in the region. These essential services include, but are not limited to trauma, surgical, critical care, cardiac, obstetric, pediatric and neonatal services.

Surge capacities and capabilities are developed at ADHS/BEPR and Region levels. Hospitals must develop their own surge capability and capacity plans. These plans should consider both on and off campus surge requirements. For additional information on surge capacity and capability hospitals should contact ADHS/BEPR.

i. Security

Healthcare facilities should plan for additional security. This may be required given the increased demand for services and the possibility of long wait times for care, and because triage or treatment decisions may lead to people not receiving the level of care they think they require.

j. Mortuary Issues

To prepare for the possibility of mass fatalities during an influenza pandemic, hospitals should do the following:

- Assess current capacity for refrigeration of deceased persons.
- Discuss mass fatality plans with local and state health officials and medical examiners.
- Work with local health officials and medical examiners to identify temporary morgue sites.
- Determine the scope and volume of supplies (e.g. body bags) needed to handle an increased number of deceased persons.

In-hospital post-mortem care is another issue that must be addressed and planned for during a pandemic.

- Health care workers must follow standard precautions when caring for a patient with pandemic influenza who is deceased.
- Full personal protective equipment (PPE) must be worn if the patient died during the infectious period (i.e. within 7 days after resolution of fever in adults and 21 days after the onset of symptoms in children).
- Transfer to the mortuary or funeral home should occur as soon as possible after death.
- If the family wishes to view the body, they may be allowed to do so. If the patient died during the infectious period, the family should wear gloves and a gown.

B. Planning for Provision of Care in Non-Hospital Settings

Staff attrition will most likely force the closure of primary healthcare practices, smaller practices first, then larger practices, shifting demand for services to hospital emergency departments. This process will disrupt normal patient services, leave most primary healthcare assets abandoned, and create great pressures on hospital emergency departments. Understaffed skilled nursing facilities will face in-house outbreaks of influenza among fragile patients. Home healthcare services will be critically challenged, leaving thousands of vulnerable clients stranded without services. Some of these clients will manage with the help of family, friends, or neighbors, but others who require skilled nursing services may succumb to chronic illnesses or infection. With the elimination of primary healthcare practices, and nursing home degradation it will be necessary to develop outpatient call in lines and websites to ease the burden on emergency departments. See also Supplement 8 and Supplement 10.

1. Non-hospital Healthcare Facilities

In a pandemic, those presenting with influenza-like-illness to hospital emergency departments should ideally be directed away from these facilities for diagnosis and triage wherever possible. The intent is to reduce the transmission of influenza within facilities, an important consideration because they are closed settings with high-risk populations. Also, hospitals will become overwhelmed with the additional demands brought on by a pandemic and patients should seek the appropriate level of care. Community health centers and urgent care centers will be a critical resource for many patients. In addition, separate sites for those presenting with symptoms or signs of influenza should be established away from primary care, emergency departments and hospitals. These alternative ("non-traditional") sites could be schools, gymnasiums, or other sites identified by ADHS for use during the pandemic. See Appendix 1 - the Hospital Surge Capacity and Capability Planning Guide.

2. Alternative care sites

State, regional, and hospital plans include the ability to increase beds and services through surge capacity and capabilities. Alternate care sites may be located on campus (ideally) or off campus. See the Hospital Surge Capacity and Capability Planning Guide for more information.

IV. Actions for the Pandemic Period

A. Activating the facility's pandemic influenza response plan

Following the initial detection of pandemic influenza anywhere in the world, ADHS will communicate the level of pandemic influenza response plan activation. See Table 1 for hospital triggers based upon pandemic influenza periods.

1. Pandemic Influenza Reported Outside the United States

If cases of pandemic influenza have been reported outside the United States, the main steps will be to:

- Establish contact with key public health, healthcare, and community partners.
- Implement hospital surveillance for pandemic influenza, including detection of patients admitted for other reasons who might be infected with the pandemic strain of influenza virus.
- Implement a system for early detection and antiviral treatment of healthcare workers who might be infected with the pandemic strain of influenza virus.
- Reinforce infection control measures to prevent the spread of influenza (see Supplement 4).
- Accelerate the training of staff, in accordance with the facility's pandemic influenza education and training plan.

2. Pandemic influenza reported in the United States

If cases of pandemic influenza have been reported in the United States, additional steps for healthcare facilities will be to:

- Identify when pandemic influenza cases begin in the community. (See Supplement 1)
- Identify, isolate, and treat all patients with potential pandemic influenza. See also Supplements 4, 5, and 8.
- Implement activities to increase capacity, supplement staff shortages, and provide supplies and equipment.
- Maintain close communication within and among healthcare facilities and with ADHS and local health departments.

Table 1. Hospital Pandemic Influenza Triggers

Pandemic Influenza Level	Suggested Actions
Inter-Pandemic Period	• Conduct planning • Conduct education/training • Conduct hospital surveillance for influenza • (Supplement 1)
Pandemic Alert Period	• Increase preparation; refine local plan • Conduct hospital surveillance for influenza • (Supplement 1)
Pandemic Period ***Pandemic influenza outside the United States***	• Establish contact with key public health, healthcare, and community partners. • Implement hospital surveillance for pandemic influenza (Supplement 1) in incoming patients and previously admitted patients. • Implement a system for early detection and treatment of healthcare personnel who might be infected with the pandemic strain of influenza. • Reinforce infection control procedures to prevent the spread of influenza (Supplement 4). • Accelerate staff training in accordance with the facility's pandemic influenza education and training plan.
Pandemic Period ***Pandemic influenza in the United States***	As above, plus: • Implement activities to increase capacity, supplement staff, and provide supplies and equipment. • Maintain close contact with and among healthcare facilities and with state and local health departments. • Post signs for respiratory hygiene/cough etiquette. • Maintain high index of suspicion that patients presenting with influenzalike illness could be infected with pandemic strain. • If pandemic strain is detected in local patient, community transmission can be assumed and hospital would move to next level of response.

Table 1. Hospital Pandemic Influenza Triggers – cont.	
Pandemic Period ***Pandemic influenza in the local area***	As above, plus; <u>Emergency department (ED)</u> • Establish segregated waiting areas for persons with symptoms of influenza. • Implement phone triage to discourage unnecessary ED/outpatient department visits. • Enforce respiratory hygiene/cough etiquette. Access controls • Limit number of visitors to those essential for patient support. • Screen all visitors at point of entry to facility for signs and symptoms of influenza. • Limit points of entry to facility; assign clinical staff to entry screening. <u>Hospital admissions</u> • Defer elective admissions and procedures until local epidemic wanes. • Discharge patients as soon as possible. • Cohort patients admitted with influenza. • Monitor for nosocomial transmission. <u>Staffing practices</u> • Consider furlough or reassignment of pregnant staff and other staff at high risk for complications of influenza. • Consider re-assigning non-essential staff to support critical hospital services or placing them on administrative leave; cohort staff caring for influenza patients. • Consider assigning staff recovering from influenza to care for influenza patients. • Implement system for detecting and reporting signs and symptoms of influenza in staff reporting for duty. • Provide staff with antiviral prophylaxis, according to HHS recommendations (See Supplement 7).

Table 1. Hospital Pandemic Influenza Triggers – cont.	
Pandemic Period	
Nosocomial transmission	• As above, plus, if nosocomial transmission is limited to only a small number of units in the facility: • Close units where there has been nosocomial transmission. • Cohort staff and patients. • Restrict new admissions (except for other pandemic influenza patients) to affected units. • Restrict visitors to the affected units to those who are essential for patient care and support. • See also Supplement 4.
Widespread transmission in community and hospital; patient admissions at surge capacity	As above plus: • Redirect personnel resources to support patient care (e.g., administrative clinical staff, clinical staff working in departments that have been closed [e.g., physical/occupational therapy, cardiac catheterization]). • Recruit community volunteers (e.g., retired nurses and physicians, clinical staff working in outpatient settings). • Consider placing on administrative leave all non-essential personnel who cannot be reassigned to support critical hospital services.

ARIZONA DEPARTMENT OF HEALTH SERVICES
HOSPITAL SURGE CAPACITY AND CAPABILITY PLANNING GUIDE
(Developed and maintained by the Bureau of Emergency Preparedness and Response)

I. GENERAL

A. Purpose: The purpose of the Hospital Surge Capability and Capacity Plan is to provide a framework for applying federal, state, regional, and local resources and capabilities to deliver hospital based care during a large scale public health emergency. A public health emergency may consist of victims from a chemical, biological, radioactive, nuclear, high yield explosive (CBRNE) event as well as a man made, natural disaster, or pandemic event. The Arizona Department of Health Services (ADHS) will notify hospitals of any condition or situation requiring their potential or immediate response to a public health emergency.

(1) *Medical surge* describes the ability to provide adequate medical evaluation and care during events that exceed the limits of the normal medical infrastructure of an effected community.

(2) *Capacity* is the ability to evaluate and care for a markedly increased volume of patients that exceeds normal operating requirements.

(3) *Capability* refers to the ability to manage patients requiring unusual or very specialized medical evaluation and care.

B. Scope: This document is intended to provide guidance for coordination of hospital response to public health emergencies that occur within the State of Arizona.

C. Direction and Control:

(1) **Incident Command:** ADHS will use the Incident Command System (ICS) as outlined in the National Incident Management System (NIMS) and directed by the National Response Plan (NRP) to work with other agencies and organizations in a coordinated manner based on the size and scope of the public health emergency**.**

(2) **Hospitals:** Hospitals in Arizona will use the Hospital Emergency Incident Command System (HEICS) during a public health emergency.

(3) **Local Health Jurisdictions:** ADHS will support local jurisdictions and regions through the Health Emergency Operations Center (HEOC).

(4) **Emergency Management:** ADHS will coordinate with the State Emergency Operations Center (EOC) and local jurisdiction EOCs.

D. Activation and System Response:

ADHS will alert hospital emergency departments, community health centers, tribal health centers, and ambulance companies of events according to the following 6 categories:
MCI (Burn, Explosion, Chemical, Radiation, Trauma or Biological)

- Law Enforcement
- Evacuation
- Natural Disaster
- NDMS
- Amber Alert

Information regarding activation and system response will be communicated via the EMSystem. ADHS may refer hospital personnel on the EMSystem to the Secure Integrated Response Electronic Notification (SIREN) for further detailed information.

In addition, event information will be sent through the Health Alert Network (HAN) to hospital administration and emergency departments, infection control practitioners, physicians, nurse practitioners, community and tribal health centers, local health departments and other agencies via fax, e-mail and conference calls.

II. SIX TIER SYSTEM

The Arizona plan for regional hospital surge capacity is shown in Table 1 and is consistent with the Department of Health and Human Services 6 tier plan.

A. Tier 1: Hospital patient load has increased due to a local public health emergency or an influx of patients from another county, region, or state. A Tier 1 event may not overwhelm a hospital or hospital system. Hospital administration activates the hospital over-capacity plan.

B. Tier 2: A public health emergency occurs within Arizona or one of the surrounding states that requires more emergency department or inpatient hospital beds, or both, than available through a Tier 1 response. The Governor of Arizona declares a state of emergency. Hospital administration expands the number of emergency department or inpatient beds, or both, through the opening of centers on the hospital campus. Hospitals activate mutual aid agreements. Intra-region and ADHS coordination may be required.

C. Tier 3: A Tier 3 response to a major public health emergency event requires coordination and all available resources within the region as well as ADHS coordination of hospital and healthcare facility assets. The Governor of Arizona declares a state of emergency. A public health emergency that requires a Tier 3 response may instantaneously severely damage local infrastructure as the result of a natural disaster, or terrorist event. The public health emergency also may be slow building such as a bioterrorism event or a pandemic that may come in several waves. A public health emergency that requires a Tier 3 response ay be comprised of several Tier 2 events that together stress the regional healthcare system requiring Tier 3 planning to be implemented. Healthcare facilities and systems must be prepared to implement drastic measures to save and preserve life. A public health emergency requiring a Tier 3 response may impact on all the counties in a region.

D. Tier 4: A Tier 4 response is the consequence of a catastrophic event that totally overwhelms the local and region's ability to respond. ADHS provides intrastate coordination of hospital and healthcare facility assets. The Governor of Arizona declares a state of emergency. Additional federal aid or assistance from other states may or may not be available or required. In most cases hospitals should not rely on external assistance for a minimum of 72 hours. The victims of a public health emergency that requires a Tier 4 response, especially one of sudden onset, will fall into one of four categories in decreasing order of severity: (1) those immediately killed, (2) those destined to die regardless of any care received, (3) those whose survival depends on timely and appropriate medical care, (4) and those who will live even without medical attention. A community response network considers off campus center sufficiency of care compared to hospital standard of care for diagnosis, treatment, and transfer policy and procedures.

E. Tier 5: A Tier 5 response is the process by which Arizona and other states assist one another and coordinate management and response activities during times of crisis. The Governor of Arizona declares a state of emergency. Response efforts include all state agencies that oversee emergency management, public health, and public safety emergency preparedness and response. Collaborative efforts between Arizona and other states promote system-wide consistency in response strategies and ensure optimal utilization of available health and medical resources. The basis for an effective regional response is an open exchange of information, incident management coordination, and mutual aid support. The community response network considers off campus center sufficiency of care compared to hospital standard of care for diagnosis, treatment, and transfer policy and procedures.

F. Tier 6: A Tier 6 response is a federally declared emergency or an Incident of National Significance under Emergency Support Function #8 of the National Response Plan (NRP). The federal government may also authorize aid under the Robert T. Stafford Disaster Relief and Emergency Assistance Act. The federal response is coordinated with Arizona's response by the Department of Homeland Security (DHS) through the Federal Emergency Management Agency (FEMA) and the Department of Health and Human Services (HHS). The National Disaster Medical System (NDMS) may also be mobilized to provide increased medical support. During a pandemic the NDMS most likely will not be available because the teams consist of medical personnel from other states also involved in the pandemic. The community response network considers off campus center sufficiency of care compared to hospital standard of care for diagnosis, treatment, and transfer policy and procedures.

Table 1. Hospital Surge Capacity and Capability Plan (HSCCP) Tier system

Event Size	Increased	Large Scale	Mass Casualty/Fatality Incident			Catastrophic Incident
			Surge Capacity	Extreme Surge Capacity	Far above Surge Capacity	
Conditions	**Localized incident** resulting in patient load increase.	Arizona Governor Declaration of State of Emergency				Presidential Declaration of State of Emergency.
		Local hospitals activate mutual aid agreements. Intra-region and ADHS coordination may be required.	**Intra-region coordination required** as mutual aid provided by other resources within the region. **ADHS coordination required** to integrate hospital and healthcare assets with other response disciplines.	**Intrastate coordination and mutual aid** provided by other regions in Arizona with ADHS coordination of hospital and healthcare assets**.**	**Interstate coordination and mutual aid** provided by other states to support Arizona.	Overwhelmed situation with **federal assistance required.**
Surge Level	**Tier 1**	**Tier 2**	**Tier 3**	**Tier 4**	**Tier 5**	**Tier 6**
Resources	Activation of hospital(s) **over capacity plan(s).**	Activation of litter use to establish **on-campus centers.**	Coordination of tactical mutual aid between jurisdictions within the region. All medical resources brought to areas of greatest need. **State assets may be required by on-campus centers**.	Full range of State health and medical resources are brought to bear. **State assets required by off-campus centers**.	Off campus center overflow. **Assets from other states required by off-campus centers**.	Off campus center overflow**. DMAT, DMORT, NDMS support required.**

G. Conditions for Implementation:

This plan will be implemented in response to a public health emergency resulting from terrorist action, natural disaster, or man-made catastrophe within the State of Arizona.

H. Agencies that may be Assisting:

(1) The National Disaster Medical System (NDMS) is a section within the U.S. Department of Homeland Security, Federal Emergency Management Agency, Response Division, Operations Branch, and has the responsibility for managing and coordinating the Federal medical and mortuary affairs response to major emergencies and Federally declared disasters.

(a) Disaster Medical Assistance Teams (DMAT) a group of medical and support personnel designed to provide emergency medical care during a disaster or other unusual event. Up to 3 DMATS can be deployed within 24 hours to a disaster site. To supplement the standard DMATs, there are highly specialized DMATs that deal with specific medical conditions such as crush injury, burn, and mental health emergencies.

(b) The National Medical Response Team (NMRT) is a specialized response force designed to provide medical care following CBRNE incidents. This unit is capable of providing mass casualty decontamination, medical triage, primary and secondary care to stabilize victims for transport to tertiary care facilities in a HAZMAT environment. There are four NMRT's tasked to support the NDMS.

(c) Disaster Mortuary Operational Response Teams (DMORT) are composed of funeral directors, medical examiners, coroners, pathologists, forensic anthropologists, medical records technicians and transcribers, finger print specialists, forensic odontologists, dental assistants, x-ray technicians, mental health specialists, computer professionals, administrative support staff, and security and investigative personnel to provide victim identification and mortuary services. There is only one WMD DMORT that can process contaminated remains.

(2) Centers for Disease Control and Prevention (CDC) may provide response teams and laboratory support to the affected region.

(3) The American Red Cross (ARC) and/or the Salvation Army, while not providing for healthcare, does provide for mass care assistance and support, when a disaster event exceeds the resources and capacity of state and local responders.

(4) Department of Defense (DOD) has several units that may assist civilian authorities under the National Response Plan (NRP). DOD medical assistance must be requested through the Principal Federal Agency charged with disaster relief subject to approval by the Secretary of Defense.

(a) Under the NRP, U. S. Army Corps of Engineers are required to provide disaster relief during a declared emergency or an incident of National Significance.

(b) As directed by the President or the Secretary of defense, the United States Northern Command (USNORTHCOM) provides military assistance to civil authorities, including consequence management operations.

i. Natural Disaster Relief
ii. Military assistance to civilian disaster organizations
iii. Oil and hazardous substances incident and emergencies
iv. Public health emergencies
v. Technological and manmade disaster relief
vi. CBRNE support including DOD's incident management assistance for CBRNE events.

(c) Joint Task Force Civil Support (JTF-CS) plans and integrates DOD support to the designated Lead Federal Agency for domestic CBRNE consequence management operations. When directed by the Commander of USNORTHCOM, JTF-CS will deploy to the incident site, establish command and control of designated DOD forces, and provide military assistance to civil authorities to save lives, prevent injury and provide temporary critical life support.

(5) Other Agencies as directed by the Federal Government under the activation of the NRP.

I. Hospital Assumptions:

(1) The combined expertise and capabilities of government at all levels, the private sector, and nongovernmental organizations may be required to prevent, prepare for, respond to, and recover from a public health emergency.

(2) Adequate staff may or may not be available at the hospital and local levels for providing healthcare during public health emergency in the State of Arizona.

(3) The Governor, the Arizona State Public Health Officer, and ADHS staff will manage public health and medical support requirements.

(4) Surge capacity may require a temporary redirection of personnel and financial resources from other programs.

(5) In most cases, outside federal support will not begin to arrive into the public health emergency zone to assist hospitals for a minimum 72 hours into the incident.

(6) Casualties may or may not be contaminated by a CBRNE or hazardous material.

(7) The incident could involve CBRNE or other hazardous materials.

(8) Biological weapons of mass destruction (WMD) may or may not be infectious (transmitted from human-to-human). If the pathogen (such as *Bacillus anthraces*) is not transmitted from human-to-human then the event will not spread and become an epidemic. If the pathogenic event is an infectious biological agent such as smallpox (variola virus) then it may become an epidemic or even a pandemic.

(a) The infectious disease outbreak may or may not be a natural event.

(b) There may or may not be an outbreak even if the disease is spread person-to-person.

(c) The first set of cases will be in one place (the origin of the exposure), however the secondary infection will spread will be to family members, workers, other people of casual (unknown contact), etc. of those contacting the primary set of cases. The cases will become non-localized to place, however, time (incubation period) should be somewhat consistent (number of days after the initial exposure to the primary individuals).

(d) There is a chance of the outbreak becoming an epidemic even proceeding to pandemic level.

(9) Hospitals normally request patient remains be retrieved by local funeral homes; however, the local funeral homes may or may not accept the remains. Hospitals may or may not have to store remains until the Arizona Mass Fatality Response Plan can be implemented or the local Medical Examiner can find cold storage.

III. MISSION:

A. Planning Factors:

(1) Planning factors for support of the hospital efforts following an ADHS declared public health emergency must consider available commercial resources as well as local and state assets.

(2) Availability of assets and facilities at, or close to hospitals during the public health emergency. These planning factors should include:

(a) Transportation, to include commercial, federal, state, county, city, and tribal systems may be needed for, evacuation, patient movement, and rapid transport of vital medical supplies from the Federal Emergency Management Agency (FEMA) airhead, or other logistics support centers.

(b) Security measures required to protect the hospital and to deliver medical supplies.

(c) Capabilities of the county or region and other privately owned agencies to expand response or increase in Tier response as the situation dictates.

IV. EXECUTION:

ADHS may receive a request for assistance from federal, state, county, and local agencies. The request may be for assistance within Arizona, to assist a neighboring state, or to augment federal support to another state, tribal government or U.S. Territory. ADHS will issue alerts, notices and bulletins to hospitals, local health departments, and other healthcare providers as required by the situation.

Key tasks that hospital administration will need to address through Tier 1 through Tier 6 depending on the public health emergency and impact on the hospital community are listed below.

A. Key Tasks: Planning and Coordination:

(1) Activate HEICS and open the hospital command center.
(2) Implement surveillance procedures as determined by the local health department and ADHS.
(3) Use mutual aid agreements with other hospitals and health care agencies for additional medical supplies and equipment, pharmaceuticals, personnel, and transfer arrangements.
(4) Arrange for delivery of essential goods and services, specifically, regular and disposable linen, hospital beds, additional food for patients and staff, portable negative air machines and HEPA filters, potable water and water purification equipment, and diesel fuel for the emergency generator.
(5) Implement policy and procedures for patient registration and tracking, and routing and maintenance of medical record documentation when receiving a large influx of patients.
(6) Coordinate with school nurses and school-based clinics, long term care facilities, home health agencies, mental health facilities, and urgent care centers.
(7) Identify special patient population requirements and advise local health departments of available equipment and shortages. The special patient population includes elderly, pediatric, pregnant women, physically disabled, and behavioral health patients.
(8) Manage safe disposal of increased volume of medical waste.
(9) Manage unsolicited donated items.
(10) Increase hospital morgue capacity with alternate storage locations; coordinate fatality management with the local Medical Examiner with legal jurisdiction
(11) Coordinate communications between the hospital Public Information Officer (PIO) and the Joint Information Center (JIC).
(12) Initiate recovery plan for financial and medical records, information systems, and restoration of supply inventory, including tracking of all expenditures caused by the event.
(13) Initiate plan for clean up, salvage, garbage and waste disposal, equipment and physical plant restoration.

B. Key Tasks: Communication systems

(1) Implement procedures for receiving and distributing notifications, alerts, and activations from state and local agencies.
  (a) EMSystem
  (b) Health Alert Network (HAN) including the Secure Integrated Response Electronic Notification (SIREN)
(2) Use redundant communication systems according to established procedures if landlines, fax machines, cellular phones, and paging systems are inoperable.
  (a) Emergency Medical Systems Communications (EMSCOM)
  (b) 800 MHz radio system
  (c) RACES
  (d) Satellite telephones
  (e) Satellite intranet
  (f) Telemedicine network
(3) Use automated system for group notification of a potential disaster
(4) Establish a long term waiting area for patients' families with access to information and counseling services.
(5) Obtain translators and deaf interpreters.
(6) Manage increased volume of telephone calls to hospital switchboard; confirm procedures for release of information and referral to external agencies**.**

C. Key Tasks: Security

(1) Determine need for total lockdown of hospital and notification of local law enforcement.
(2) Establish communication with individuals immediately outside established perimeter if hospital is in total lockdown.
(3) Provide staff access to hospital during lockdown separate from emergency department and decontamination activity
(4) Establish control of access and egress if lockdown not indicated by the event.
(5) Confirm control of internal access to the emergency department, inpatient areas and support departments within hospital.
(6) Confirm control of access to outdoor air intakes and mechanical rooms.
(7) Provide onsite capability to produce photo identification for all staff including physicians and supplemental personnel.
(8) Verify need to augment hospital security, especially if local law enforcement unavailable, and obtain additional security personnel if needed.
(9) Establish crowd control on hospital campus.
(10) Establish routing of traffic to triage and decontamination areas.

D. Key Tasks: Personnel

(1) Determine current staffing capability and additional requirements for increased volume and acuity of patients. Additional staffing needs may be for a short duration for a CBRNE event and long term up to two months or more during a pandemic event.
(2) Provide credentialing and supervision of clinicians not normally working in the hospital (physicians, registered nurses, pharmacists, respiratory therapists).
(3) Use agreements with educational institutions to obtain personnel, both faculty and students.
(4) Manage unsolicited offers of help from undocumented clinicians.
(5) Implement the preparedness plan for families of staff.
(6) Provide housing and feeding of staff unable to leave the hospital.
(7) Develop a staffing plan to afford staff time off to allow a return to normal family routine if staff over worked for long periods.

E. Key Tasks: Decontamination and use of personal protective equipment

(1) Decontamination
  (a) Authorize implementation of decontamination procedures.
  (b) Maintain patient privacy during decontamination process.
  (c) Provide sufficient space for processing and triage of patients.
  (d) Provide security for patients and staff during decontamination process.
  (e) Monitor procedures according to the hospital decontamination plan.
  (f) Monitor hot and cold water supply, especially for special population patients.
  (g) Establish emergency power and lighting at the decontamination site if required.
  (h) Provide radiation monitors at the decontamination site.
  (i) Establish and monitor effluent (runoff) collection procedures.
  (j) Track contaminated and decontaminated patients through the process.
  (k) Establish procedures for collection of personal effects and clothing according to law enforcement requirements if the public health emergency is determined to be a crime scene.
  (l) Establish procedures for managing law enforcement weapons during the decontamination process.
  (m) Provide decontamination procedures for special population patients, specifically, pediatric, pregnant, elderly, chronically ill, and disabled patients.
  (n) Provide decontamination procedures for animals and pets. Local Animal Control, Humane Society, and animal shelter assistance may be required for animal restraint and or decontamination assistance.

(2) Determine PPE requirements:

(a) Initiate hospital policy and procedures for use of PPE (Level C, N95 and surgical masks), storage, and preventive maintenance.

(b) Obtain access to documentation of training and fit testing during an event.

F. Key Tasks: Pharmaceutical:

(1) Conduct inventory of medications of choice and alternate medications to obtain a minimum supply for 3 days prophylaxis for designated employees and their families. Report inventory and shortages in medications and administration supplies to the local health department.

(2) Implement dispensing of prophylaxis and vaccination procedures as indicated by the event to staff and their families.

(3) Receive and distribute medications and administration supplies from other sources, including the Strategic National Stockpile.

(4) Initiate protocols for dispensing of drugs to asymptomatic and symptomatic patients as well as prophylaxis to patient family members.

G. Key Tasks: Hospital laboratory:

(1) Comply with special protocols and packaging for sampling CBRNE as directed by the State Laboratory.

(2) Alert the Arizona State Laboratory if samples are being sent and method of transportation.

(3) Manage clinical specimens if laboratory is contaminated or overwhelmed by a large influx of patients.

H. Key Tasks: Patient Transfer

(1) Implement patient triage, transfer, and discharge procedures to create open beds.

(2) Implement arrangements to transport patients to other healthcare facilities and initiate tracking procedures.

(3) Distribute instructions for home care specific to the agent or event during a public health emergency in case large numbers of patients are unable to be admitted due to resource limitations.

(4) Initiate plan for processing prescriptions for discharged patients.

(5) Implement procedures to evacuate the hospital in a disaster.

(6) Plan for medical evacuation of patients to out of state locations.

(7) Plan for receiving patients that have been sent to hospitals out of region or out of Arizona.

I. Key Tasks: Alternate Care Site

(1) Work with county, region, and state agencies to open an off campus center, obtaining: medical, nursing, and ancillary staff, security personnel, medical record and patient tracking systems, equipment and supplies, medical waste pickup, pharmaceuticals and facility maintenance.

(2) Prepare to receive patients arriving at the center, possibly by alternate methods of transportation (busses, vans, etc.) Confirm location for ease of transferring patients.

(3) Communicate with other hospitals and first responders regarding patient transfers once security is in place at each facility.

(4) Implement plan to incorporate DMATs and DMORTS into system of hospital and off campus centers in coordination with county, region, and ADHS.